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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/762,255

01/23/2004

Tzer-Min Lee

LEET3011/EM

5538

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06/29/2005

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EXAMINER

MILLER, CRAIG S

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/762,255

Applicant(s)

LEE, TZER-MIN

Examiner

Craig Miller

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

1. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

*A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

*Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.*

2. Claims 1, 2, 6, 7, 10 and 11 are rejected under 35 U.S.C. 103 as being unpatentable over Fournier (6,023,985) in view of Notohardjono *et al.* (5,744,975) and Co *et al.* (6,351,827).

Fournier discloses the instant invention essentially as claimed, including a computer [38] controlling the environment for a device under test [14], except Fournier does not specify that the DUT should undergo functional test or have computer controlled variable voltage applied during the tests. Notohardjono *et al.* discloses that a DUT should undergo processing performance test during tests. Co *et al.* discloses in col. 1 lines 50+ that electronic DUT voltages should be varied during stress tests +/- 5% of value (col. 6 lines 30+). Because the devices of Fournier, Notohardjono *et al.* and Co *et al.* are all within the art of device testing and because Notohardjono *et al.* suggests that the DUT should be functionally tested during the test and that the DUT supply voltage should be varied, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Fournier such DUT functional test during the test and including applied 5% variable voltages during the tests so as to receive the expected benefits derived there from such as enhanced system stress during tests as suggested by Notohardjono *et al.* and Co *et al.* absent a showing of unexpected results or synergistic effect from any particular claimed combination.

More particularly with respect to claim 6, said claim is directed towards preferred test temperatures. Notohardjono *et al.* discloses temperatures as low as -50 degrees Celsius in figure 6.

More particularly with respect to claim 2. Said claim is directed towards supplying voltages of at least 12v, 5v and 3.3v, conventional personal computer motherboard, hard drive and CPU supply voltages, respectively. Because Fournier discloses generic devices under test, because Notohardjono et al. discloses in col. 12 that any electronic device may be so tested and because it is known in general to test computer components within environmental chambers (Examiner notes Brown), it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Fournier such required supply voltages during the tests so as to receive the expected benefits derived there from such as operation of each component within its voltage requirement range absent a showing of unexpected results or synergistic effect from any particular claimed combination.

More particularly with respect to claim 10, said claim is directed towards the use of a NIC (network interface card) for communications between the control computer and computer component under test. Because NICs are commonly used for inter-computer communications and because Fournier et al. as modified above includes computer component DUT, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Fournier as modified above such known communications means during the tests so as to receive the expected benefits derived there from such as enhanced inter-computer communications absent a showing of unexpected results or synergistic effect from any particular claimed combination.

3. Claims 3-5 are rejected under 35 U.S.C. 103 as being unpatentable over Fournier in view of Notohardjono *et al.* and Co *et al.* as applied to claims 1 and 2 above and further in view of Brown (5,471,877).

Said claims are directed towards variable voltage supply values being within 10% of nominal supply voltages. Fournier as modified above does not specify 10% but includes up to 5% variance in voltage supply. Brown discloses in col. 3 lines 43+ that electronic supply voltages should be varied by up to 10% at the extreme for testing electronics under stress. Because the devices of Fournier as modified above and Brown are all within the art of device testing and

because Brown suggests that the DUT supply voltage should be varied up to 10%, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Fournier as modified above such applied 10% variable voltages during the tests so as to receive the expected benefits derived there from such as enhanced system stress during tests as suggested by Brown absent a showing of unexpected results or synergistic effect from any particular claimed combination.

4. Claims 8 and 9 are rejected under 35 U.S.C. 103 as being unpatentable over Fournier in view of Notohardjono *et al.* and Co *et al.* as applied to claims 1 and 7 above and further in view of Christiaens *et al.* (5,795,063).

Fournier as modified above discloses the instant inventions essentially as claimed but does not specify controlling the test voltages and test temperatures with a GPIB interface. *Christiaens et al.* discloses in fig. 1 that a GPIB interface should be used to control a test temperature (col. 6 lines 47+) and test supply voltage (col. 6 lines 42+). Because the devices of Fournier as modified above and *Christiaens et al.* are all within the art of device testing and because *Christiaens et al.* suggests that the DUT supply voltage and temperature should be controlled using a GPIB interface, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Fournier as modified above such a control interface during the tests so as to receive the expected benefits derived there from such as enhanced system communications simplicity during the tests as suggested by *Christiaens et al.* absent a showing of unexpected results or synergistic effect from any particular claimed combination.

10. The prior art made of record but not relied upon is deemed pertinent to applicant's disclosure.

Chalmers (5,039,228) discloses combining vibration and temperature stress testing.

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11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Craig Steven Miller whose telephone number is (571) 272-2219. Central facsimile services are now available at (703) 872-9306.

The Examiner can normally be reached on Mondays through Thursdays from 6:40am-2:10pm EDT. Should repeated attempts to reach the Examiner be unsuccessful, the Examiner's Supervisor, Marc Hoff may be reached at (571) 272-2216.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Private PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Craig Steven Miller (ss)  
23 June 2005



**PATRICK ASSOUD**  
**PRIMARY EXAMINER**